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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,820	10/01/2003	Aristotle Nicholas Balogh	026970-010051US	8779
20350	7590	03/08/2010	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834		RAYYAN, SUSAN F		
		ART UNIT		PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/674,820	BALOGH, ARISTOTLE NICHOLAS	
	<b>Examiner</b>	<b>Art Unit</b>	
	SUSAN FOSTER RAYYAN	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 20 November 2009.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,4-12,15-18,21-30 and 33-37 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,4-12,15-18,21-30 and 33-37 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/20/2009.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1, 4-12, 15-18, 21-30, 33-35 are pending.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

As per claim 18, this claim is recites “computer readable medium storing instructions”. The specification lacks clear antecedent support of the claimed “computer readable medium” terminology, though the specification at paragraph [0023] describes storage devices for storing instructions. The broadest reasonable interpretation of a claim drawn to a computer readable medium typically covers forms of non-transitory tangible media and transitory propagating signals in view of the customary and ordinary meaning of computer readable media, particularly when the specification is silent. Thus the claim should be modified to cover only statutory embodiments to avoid a rejection under 35 U.S. C. 101 by adding the limitation “non-transitory” to the claim and re-phrasing the specification (MPEP 2163.07) to provide antecedent basis for the new claim terminology (MPEP 608.01(o) and 37 CFR 1.75(d)(1)).

3. Claims 21-27, fully incorporating the deficiencies of claim 18 are likewise objected.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1,11-12,18, 28-30,33 rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,785,675 issued to John Graves (“Graves”) et al. and US 2002/0013856 issued to J. Joaquin Garcia-Luna-Aceves et al (“Garcia-Luna-Aceves”).**

**As per claim 1** Graves anticipates a method for processing query messages

over a

network (see Abstract), the method comprising:

extracting a plurality of queries from a plurality of query messages received from a plurality of users over the network (see Figure 3;reference number 310:receive individual requests and column 4, lines 15-21 ,as individual , independent requests, and see also column 5:Claim12);

sending the first request message to a search engine (see column 4, lines 40-42, as the aggregated query is sent to the database management system and see also column 5:Claim12 );

receiving a response message from the search engine (see column 4, lines 40-42, as a result set is received and see also column 5:Claim12), the response message including a plurality of replies and the first sequence number, wherein the first sequence number is associated with the plurality of replies, and wherein each reply associated with the first sequence number is generated in response to a query also associated with the first sequence number (see column 4, lines 45-50 and see also column 5:Claim12);

creating a plurality of reply messages from the plurality of replies (see column 4, lines 50-55, as results are sent to corresponding requestor and see also column 5:Claim12); and sending the plurality of reply messages to the plurality of users over the network(see column 4, lines 50-55, as results are sent to corresponding requestor and see also column 5:Claim12).

Although Graves teaches creating a first request message including a plurality of queries (see column 1, line 66 to column 2, line 5), Graves does not specifically teach a first sequence number associated with the plurality of queries. On the other hand, Garcia-Luna-Aceves shows, at figure 6, an update message that includes a sequence number and an associated update list with multiple entries. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to associate a sequence number with a plurality of queries as in Garcia-Luna-Aceves in the invention of Graves in order to keep track of or identify the plural queries associated with the aggregated request.

**Claim 11 -12** are rejected based on the same rationale as claim 1 above and Graves teaches: a first network interface coupled to a first interface and a second network interface coupled to a second network and at least one processor ...a memory .... At figures 1-2.

**Claim 18** is rejected based on the same rationale as claim 1 above.

**As per claim 28** same as claim arguments above and Garcia-Luna-Aceves does teach creating a second request message including a plurality of queries and sending the second request message to the search engine, and receiving a response message from the search engine, wherein the response message includes replies generated in response to the first sequence number and a third sequence number, the third sequence number identifying a subsequent request message created after the first request message (figure 6: update message including sequence number and associated update list with multiple entries).

**As per claim 29** same as claim arguments above and Graves teaches: wherein sending the plurality of reply messages to the plurality of users comprises identifying a user associated with each query from which each reply

message was generated using the state information(column 4, lines 45-50, as result set of rows matched to corresponding parameters and claim 12).

**As per claim 30** same as claim arguments above and Graves teaches:

wherein the first sequence number uniquely identifies one or more of the queries and the second sequence number uniquely identifies one or more of the replies see column 4, lines 25-30: “111”, “222”, “333” are the first sequence number and column 4, lines 45-50: result set with “111”, “222”, “333” are the second sequence number).

**As per claim 33**, same as claim arguments above and Graves teaches:

wherein the response message further includes a second sequence number that is associated with one or more replies that are not associated with the first sequence number (figure3: ref.no. 350-370, match result set to requests).

**6. Claims 4-6, 15, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves and Garcia-Luna-Aceves et al with respect to claim 1 above in view of US 7,165,166 issued to Adam Grove et al (“Grove”).**

**As per claim 4** same as claim arguments above and Graves and Garcia-Luna-Aceves do not explicitly teach determining message latency associated with the first sequence number. Groves does teach this limitation at column 10, lines 1-9, as timestamp of a request record and timestamp of a query record. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves and Garcia-Luna-Aceves with determining message latency associated with the first sequence number for performance enhancement as described by Groves at column 1, lines 13-15.

**As per claim 5** same as claim arguments above and Groves teaches:

wherein said determining a message latency includes: updating a request timestamp based on the request message, updating a response timestamp based on the response message, comparing the request timestamp and the response timestamp at column 10, lines 1-9, as timestamp of a request record and timestamp of a query record.

**As per claim 6** same as claim arguments above and Groves teaches:

receiving an additional response message from the search engine, the additional response message including an additional plurality of replies, and updating the response timestamp based on the additional response message at column 10, lines 1-9, as timestamp of a request record and timestamp of a query record.

**Claim 15** is rejected based on the same rationale as claims 4-6.

**Claims 21-23** are rejected based on the same rationale as claims 4-6 above.

**Claims 7-10, 16-17, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves and Garcia-Luna-Aceves and Groves and further in view of US Patent Application Publication Number 2002/0040414 issued to Kaitaro Uehara (“Uehara”) and US 2003/0138091 issued to William Meek et al (“Meek”).**

**As per claim 7** same as claim arguments above and Graves and Garcia-Luna-Aceves and Groves do not explicitly teach updating a query count based on the request message, updating a reply count based on the response message and comparing the query count and the reply count. Uehara does teach reply count (paragraph 120, reply count) .It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Graves and Groves with a reply count to improve monitoring Graves and Garcia-Luna-Aceves and Groves in view of Uehara do not explicitly teach query count, Meek does teach query count (paragraph 94, query count). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves and Groves in view of Uehara with a query count to track the queries.

**As per claim 8** same as claim arguments above and Uehara teaches:

receiving an additional response message from the search engine, the additional response message including an additional plurality of replies, and updating the reply count based on the additional response message (paragraph 120, reply

count).

**As per claim 9** same as claim arguments above and Uehara teaches:

updating a response count based on the response message and comparing the response count to a predetermined response count (paragraph 120, reply count)

**As per claim 10** same as claim arguments above and Uehara teaches:

receiving an additional response message from the search engine, the additional response message including an additional plurality of replies, and updating a response count based on the additional response message (paragraph 120, reply count)

**Claims 16-17, 24-27** are rejected based on the same rationale as claims 7-10 above.

**Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable**

**over Graves and Garcia-Luna-Aceves as applied to claim 1 above and**

**further in view (US 2002/0010798) issued to of Israel Ben-Shaul et al**

(“Ben-Shaul”).

**As per claim 34** same as claim arguments above and Graves and Garcia-Luna-Aceves does not explicitly teach wherein each query message is a request to resolve a domain name. Ben-Shaul does teach this limitation (at [119], as the request is redirected by the DNS system, wherein the DNS system resolves the domain name that is included in the request for the resource to allow content providers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves and Garcia-Luna-Aceves with wherein each query message is a request to resolve a domain name to directly control the delivery of content based on regional and temporal preferences, client identity and content priority as described by Ben-Shaul at abstract).

**As per claim 35** same as claim arguments above and Graves teaches: wherein extracting the plurality of queries from the plurality of query messages is performed by a front-end protocol engine that sends the request message via a wide area network to the search engine at figure 1-2.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 4-12, 15-18, 21-30, 33-35 have been considered but are moot in view of the new ground(s) of rejection.

### **Contact Information**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan F. Rayyan whose telephone number is 571-272-1675. The examiner can normally be reached on M-F, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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February 18, 2010

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